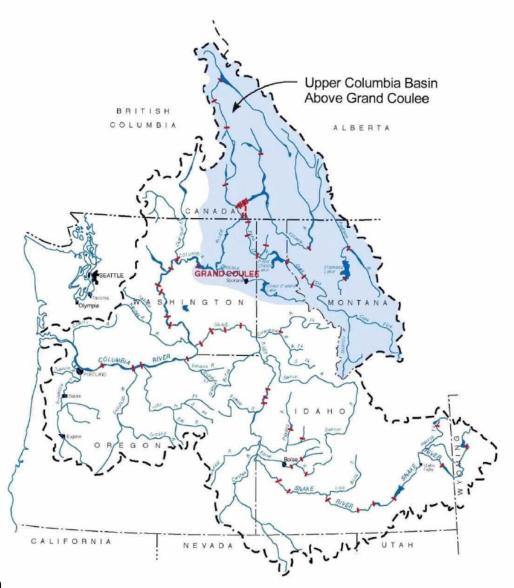
Columbia/Snake Mainstem Temperature TMDL:

December 9, 2004

Columbia River Basin



Briefing Agenda

- Background and Substance of TMDL
- Current Status
- Legal Issues
- Implementation Plan
- UAA Process
- Resources
- Decisions and Discussions

Columbia/Mainstem Temperature TMDL

Background

- Oregon, Idaho and Washington asked EPA to lead TMDL in 1997 due to multi-state issues, federal hydropower, many tribes.
- Oregon and Washington asked EPA to issue
 TMDL for their waters Idaho agreed to issue for their waters.
- 2001 MOA between EPA, Idaho, Oregon and Washington defined geographic scope, roles, and responsibilities.

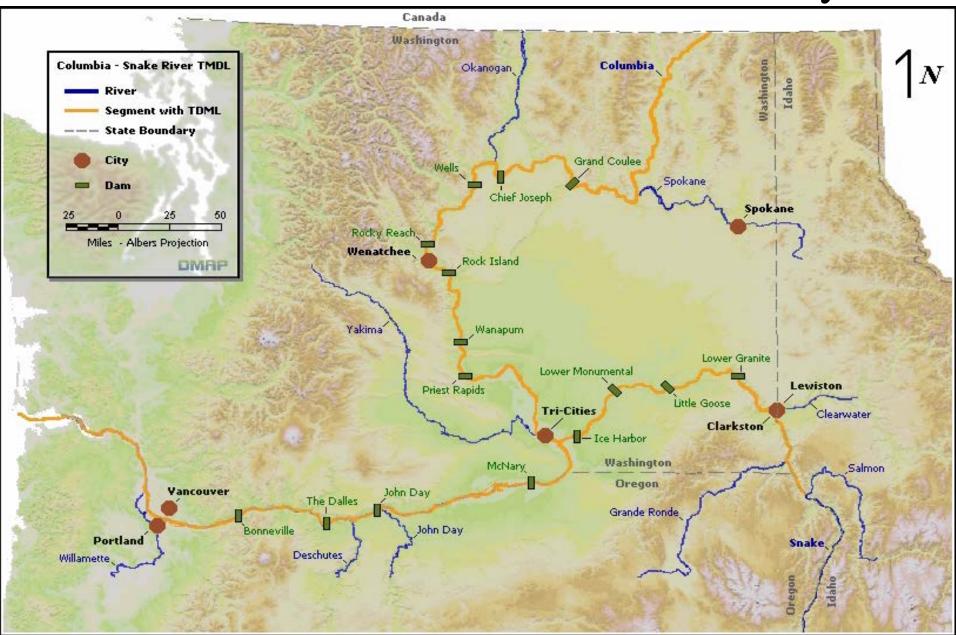
ESA - 2000 Federal Columbia River Power System Biological Opinion

- Water Quality Reasonable and Prudent Alternatives - RPAs
- Appendix B called for development of a Water Quality Plan and envisioned to provide basis for TMDL
 - Draft Plan provided by Corps in 2/2003 no further work on Implementation Plan – key issue in Lower Snake CWA lawsuit
 - Water Quality Plan used as defense in District Court Lower Snake Dams CWA decision
 - EPA stopped participating in Water Quality Plan in 2003

Columbia/Snake River Mainstem Temperature TMDL

- Geographic Scope
 - Columbia River from the Canadian border to the Pacific Ocean.
 - Snake River from the confluence with the Salmon River to the confluence with the Columbia River.
- 3 States, 14 tribes, Canadian boundary, Federal Columbia River Power System.

Columbia Mainstem TMDL Boundary



TMDL - Based on U.S. Mainstem Heat Sources

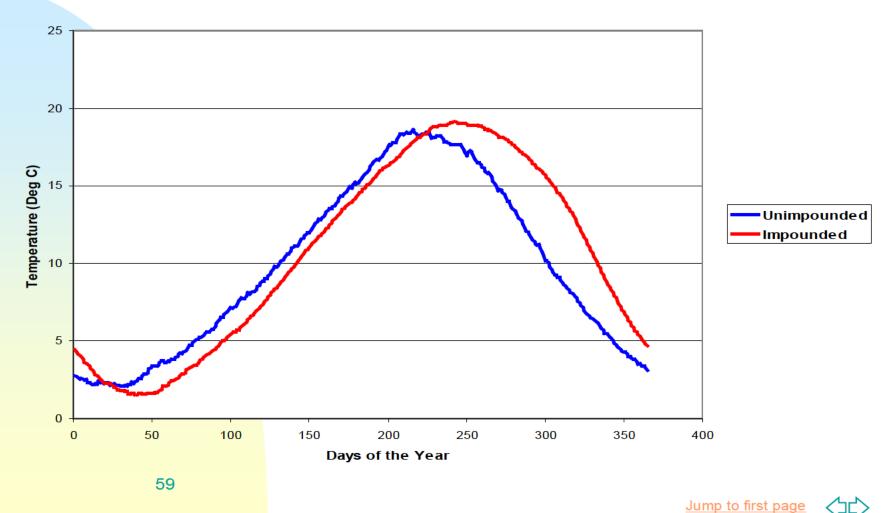
- The TMDL allocations are based on existing loads from Canada and the tributaries
- The TMDL is directed at the causes of heat pollution within the mainstem - point sources and dams
- The dams and point sources are being held for the impairment they cause, not impairment from Canada and tributaries

Substance of the Draft TMDL

- Highlights and quantifies the impacts of dams on temperature
 affects state TMDL and Re-licensing efforts
- Point source heat falls within allowable temperature increases helps permitting
- Tributary heat is minor factor compared to dams
- TMDL may encourage Fed agencies to pursue operational changes to improve temperatures.
- Standards may not be achievable in much of mainstems Friday, February 10, Draft Pre-Decisional Not Subject to

Effect of Dams on River Temperature

Simulated Temperature of Columbia River for Impounded and Unimpounded System at River Mile 546 (site of Chief Joseph Dam)



Friday, February 10, 2017

Draft Pre-Decisional - Not Subject to FOIA

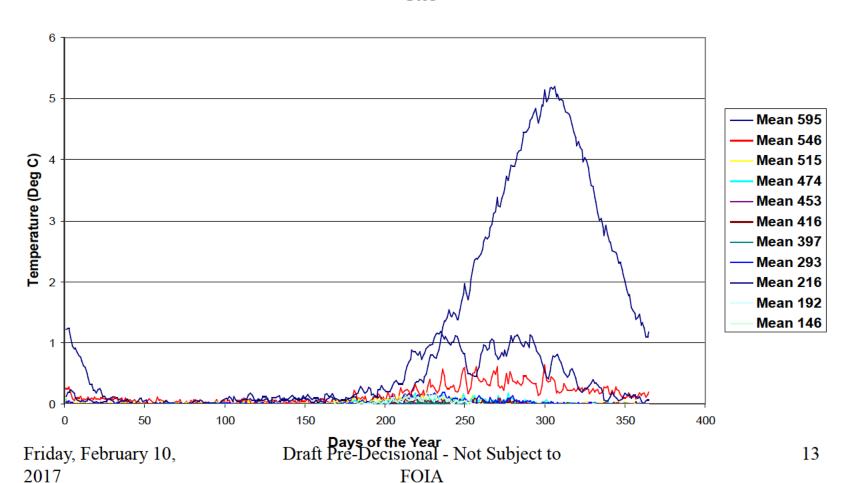
Draft TMDL Allocations

- Standards call for near-natural temperatures
- Worst case at downstream end of system, due to cumulative effects of dams and pt sources
- Pt sources take most of allowed increase
- Dams need to release near-natural temps
- A handful of small dams are OK now

Options for Dams

- Dam removal not on table
- Dworshak cold water release enhancement
- Grand Coulee powerhouse operations or Banks Lake
- Pool depth management
- Local improvements e.g., fish ladders, power decisions (McNary)
- Flood control operations seldom discussed

Temperature Improvements Needed at Each Columbia River Target Site



State and Tribal Entities

States

Idaho Department of Environmental Quality Oregon Department of Environmental Quality Washington Department of Ecology

Tribes

Colville Confederated Tribes- EPA promulgated standards

Spokane Tribe of Indians - EPA approved standards Other Columbia Basin Tribes - Fed Trust Respons.

TMDL Development Process

- TMDL Ad Hoc Committee
 - EPA, ID, OR, WA, Tribes, NOAA Fisheries,
 USFWS, Bureau of Reclamation, Corps, BPA
 - Pulp and Paper Industry and PUDs often attend
 - Met monthly for 2 years
- TMDL Technical Team
 - EPA, ID, OR, WA, and Tribes
 - Met as needed

TMDL Information Sharing Transparent Process

- Ten public workshops in 2001 and 2002 in ID, OR, and WA to share information and receive feedback
- Monthly updates at NOAA Fisheries ESA Forum meetings
- Updates at Columbia River Federal Executive meetings
- Fact sheets and other materials
- TMDL Web site

Major Effort to Share Information

- Numerous Meetings with Interested Entities
 - Federal Columbia River Power System
 - Canadian/U.S. trans-boundary meetings
 - Public Utility Districts
 - Pulp and Paper Industry
 - Irrigation Districts
 - Watershed Councils
 - Congressional Staff

Current Status

- TMDL developed in an intense public process from 2001 to November 2002.
- Preliminary Draft issued in November 2002.
- FCRPS Action Agencies (Corps, BPA and Bureau of Reclamation) expressed concerns on technical and legal issues.
- Concerns were elevated to CEQ on legal issues.
- State & Umatilla Tribe letters to CEQ on controversial issues.

Current Status

- Regional senior managers committed to move forward in 02 & 03
- Many discussions in 2002 and 2003 to move forward on a Draft Implementation Plan and share information and reach understanding on technical issues
- EPA stopped work on TMDL in Spring 2003 with the Watershed Rule and Oregon Standards and major focus on federal dams and UAA process
- Many OMB discussions on WQS & federal dams

(b) (5)



(b) (5)



Other Action Agency Concerns

- TMDL may make federal dam operators vulnerable to lawsuits.
- TMDL focuses on fish use and not other uses (like hydropower).
- The data and modeling are "insufficient."

Implementation Plan

- Regional Agreement in early 2003 to include Draft Implementation Plan with Draft TMDL when issued – Randy and Mike White
- States started developing in collaboration with Action Agencies and NOAA Fisheries.
- Last meeting and work done in March 2003.

Implementation Plan

- Originally envisioned to build on successful Lower Columbia Total Dissolved Gas TMDL
 - Short Term Strategy focuses on 2000 BiOp RPAs duration through 2010 - BiOp
 - Long Term Strategy focuses on non-RPA measures
- Intended to describe Use Attainability Analysis process
- ESA discussions with NOAA Fisheries began and stopped

UAA Process

- Key issue in Implementation Plan development states were working on describing process
- Key issue in Draft Watershed Rule & Federal Proposed Oregon Standards – Oct, 2003
- Proposed process for federal dams vetted through OMB – would give EPA responsibility for UAAs for Federal dams – very appealing to federal dam agencies

UAA Process and Issues

 Oregon/Hallock committed to UAA process in December 2003 submittal to EPA

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 OR UAA process beginning – high visibility – fed dam agencies want pilot project to vet out guidance

TMDL Resources

- 50K Grant to National Fish and Wildlife Foundation support to tribes grant expires 2/05
- Contract to Ross and Associates \$26k remaining to support hearings, response to comments and record –contract expires 12/05
- FTE support (significant)
 - Modeling
 - Support to public hearings, record, consultation, etc
 - Web page (very out of date)
- Keep aware of resource implications for decision

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- Task 1 EPA update model 2 months (?)
 - to address Oregon WQS standard changes for Columbia River Spawning Standard and spawning time changes (this may benefit load allocations for Grand Coulee and some NPDES dischargers).
 - What about new WA WQS standards?
- Task 2 Discussions and agreements with states
 - 1 month and ongoing
 - to reinitiate work and define roles and responsibilities for OR and WA. Idaho still retain issuing responsibility.

- Task 3 Reinitiate tribal consultation and coordination conversations
 - 1 month and ongoing
- Task 4 Restart collaborative discussion with states and others on implementation plan & address UAAs
 - 1 month and ongoing
- Task 5 Agree on implementation plan
 - 4 mos
 - with states, Corps, Bureau, tribes and others in a collaborative process building on Oregon UAA work and pilot federal dam UAA process

- Task 6 Finalize draft TMDL and plan public process
 - 6 months after completion of Task 1
- Task 7 Issue Draft TMDL with 90 day public process including public hearings-December 05/January/February 06
- Task 8 3 Months Respond to comments

 Task 9 – 2 Months and ongoing - ESA Consultation Process

- Task 10 EPA approve/issue Final TMDL(s)
 - June 05 if we start Task 1 on Jan 1
- Major work issue Who will be Rick Parkin?? – technical lead on TMDL

Who Will Do Work? – A Proposal

1–Modeling Cope, Allen, TMDL Unit, RP Clone,	2– State Discussions Gearheard Soscia, Psyk	3–Tribal Consultation Soscia, Gearheard. RA	4-Implementation Discussions Gearheard Soscia, Psyk, RP Clone
5-Implementn Plan Gearheard Soscia, Psyk, <i>RP</i> <i>Clone</i>	6–Finalize Draft TMDL-Cope, TMDL unit, Soscia, RP Clone, Allen Contractor	7-Public Comment - <i>TMDL unit</i> , Cope, Soscia, <i>RP Clone</i> , Allen Contractor	8-Comment Response TMDL unit, Cope, Soscia, RP Clone, Allen, Contractor
9-ESA Soscia, TMDL unit, RP Clone	10-Issue/Approve TMDL unit, Allen, Soscia, Gearheard	Italics = Not sure who person will be RP Clone = "Rick Parkin Clone"	

Next Steps if we go forward

- Agree on pathway
- DC Briefing
- Meeting with States to communicate decision and agree on next steps
- Communicate with tribal governments tribal trust responsibility & tribal standards
- Meeting with Federal agencies to communicate EPA and state decisions